



INFANT MORTA
THE

DEATH

By SIR LAURENCE BRUNTON

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INFANT MORTALITY, NATIONAL LOSS, AND THEIR PREVENTION.

Address delivered at Bristol on February 12th, 1906. The Lord Bishop of Bristol in the Chair.

By Sir LAUDER BRUNTON, M.D., D.Sc., LL.D. Edin., LL.D. Aberd.,
V.-P.R.S.

MY LORD BISHOP, LADIES, and GENTLEMEN,—There is, perhaps, no more pathetic story in history than that of the “Massacre of the Innocents.” Herod sent his men of war to the little isolated hill-town of Bethlehem and slew there all the children from two years old and under, tearing the infants from their mothers’ arms and murdering them before their mothers’ eyes. The horror of the scene appals us, and yet the true pathos of it is rather to be found afterwards, for we read :—

“ In Rama was there a voice heard, lamentation, and weeping, and great mourning, Rachel weeping for her children, and would not be comforted, because they are not.”

Dreadful as this tragedy was, it is nothing to what is being enacted now. Every day more children die in this country than were slain at Bethlehem by Herod. They die from ignorance, carelessness, or injurious sanitary surroundings, and this slaughter of the innocents is not enacted once, but is repeated day by day, week by week, month by month, and year by year. Surely it is time that we were up and doing and preventing this dreadful destruction of infant life. Nor is this all; perhaps this is not even the worst of it. Herod slew the children right off, but here, while even a greater number are slain daily, many survive, crippled in body or mind by disease, feeble in physique, feeble in intellect, and they grow up incapable of taking their proper part in life, which is, to some of them, only a long-continued martyrdom. They throng our out-patient rooms, they fill the wards of our hospitals, they are accommodated in our poor-houses, infirmaries, and asylums. Others are so feeble that when they attempt to enter the Army as

recruits they are rejected, because they do not come up to the necessary standard, and, as I have asked already in a letter to the *Lancet* nearly three years ago,* "if these men are unfit for military service, what are they good for?" They go to swell the ranks of the unemployed who either cannot work or will not work; they increase the rates, which are already so heavy, and the industrious must pay for the idle. There are yet others, who grow up apparently strong in body, but from want of good training their morals become deteriorated, and they join the criminal class and prey upon their fellows.

What is to be done to stop this waste of human life, human energy, human intellect, and work? Almost everyone deplores it, and very many are trying to remedy it. Perhaps there is no country in the world where there are so many benevolent institutions as this, and yet the condition remains. Why is this so? It is, I believe, to a great extent because these various institutions are all working at their own particular object, without regard to what others are doing, without co-operation, and very often with a certain amount of jealousy lest the success of another scheme should interfere with their own. The way in which they regard the life of the nation reminds me of the story told of his grandfather by P. T. Barnum, the celebrated showman. Barnum's grandfather was also a showman, and made a good deal of money by showing an elephant, which was then a great rarity, round the United States. After a while, becoming tired of the business, he determined to sell his interest in the animal to another man, who showed it round also, but when the time came for the division of the profits, and Barnum asked for his share, he was told there was none. "Why so?" said Barnum. "Because the animal has eaten up all the profits," was the answer. Barnum said nothing more at the time, but next morning when his partner arrived in the elephant's stable to give the animal its breakfast, he found Barnum standing there with a loaded rifle. "What are you going to do with that? Are you going to shoot me?" said the partner. "No," said Barnum, "I am not going to shoot you, but you see this beast is eating up all the profits; you can do

* *Lancet*, February 14, 1903.

what you like with your half, but I am going to shoot my half." This brought the partner to reason, and he purchased Barnum's share of the animal as well as his own, and then things went smoothly again.

In the same way, if we are to succeed in improving, as a whole, the physique of the nation as we should like, we must treat it and all its parts together and not merely one, here and there. As an example of what I mean, I may instance the case of consumption. We build hospitals and sanatoria for its treatment and, if possible, its cure, but till recently we have made no attempts to prevent it, and have allowed consumptive patients to go about spreading the disease, not only in their own homes but elsewhere. Now an attempt is being made by the medical men at the Brompton Hospital to prevent phthisical patients from doing this. They desire to follow the patients to their homes, to examine the relatives in order to ascertain that they have not already been infected, and that they too are not likely to spread the disease. They make arrangements for disinfecting houses and disinfecting the sputum of the patients and the rooms in which they have been living.

But one of the triumphs of modern sanitary science is the discovery that many people carry with them the germs of diseases such as diphtheria, pneumonia, and typhoid fever, without presenting any symptoms of the malady, and, therefore, if they spit in a public place and the sputum becomes dried and carried by the wind into the nose or mouth of some chance passenger, he or she may catch the disease and die of it. It is, therefore, not merely the sputum of persons suffering from phthisis that is dangerous, for the sputum of persons apparently healthy may convey disease. Spitting in public places ought, therefore, to be prohibited by law, but such a law cannot be passed unless we get the co-operation of the whole of the community, and this we cannot obtain until they know the dangers to which the habit of spitting exposes them.

The facts which I have just mentioned show that something more is wanted for the development of a disease than the mere presence of its germs, viz., that the soil upon which they fall

must be susceptible. This was shown in the Brompton Hospital for Consumption, where the nurses almost never took the disease, although constantly exposed to infection, but they were strong and healthy. If we can breed a strong and healthy race of men, women, and children, we shall tend to lessen the incidence of disease and, consequently, not only the expenditure upon hospitals, but the enormously greater loss caused by the inability of these sick people to do their proper work.

But, how is this to be done ?

To attain this object children should be better fed, and as the Right Hon. John Burns has truly said, their mothers should drink less tea and their fathers less spirits. In addition, however, to this a great deal can be done by proper physical training. The part of the lung which is first affected by tubercle is usually the apex ; that very part which is least used. By proper respiratory exercises the chest can be developed, the capacity of the lungs increased, and their tendency to disease diminished. Not only so, but the heart can be strengthened so that the circulation becomes more powerful, the amount of warmth formed in the body is greater, the power of resistance to cold is increased. The limbs become firmer and the muscles stronger, and at the same time their movements are more readily subordinated to the nerves, they fulfil more exactly the intention of their owner, and thus enable him not only to put out more work but better work. The nerve-centres improve along with the muscles, the mind, the emotions, and the will become better regulated, and a physically-trained child or youth becomes a better member of society. Exercises, drill, and play are all most important for obtaining this end. Their importance is becoming recognised generally, and the Board of Education is taking up the question of the teaching of physical training in schools throughout the country ; but who is to teach the teachers ?

There are a few training schools at present, but they are insufficient to supply the demand that will arise if physical training becomes universal. For this purpose there must be some national central institute for physical education with a

trained examining body, which must have authority to issue diplomas without which no person should be allowed to teach. In this way unity will be established throughout the country, and we shall get the best possible training in every part of it.

The establishment of such an institute was proposed by Miss Theodora Johnson in November, 1904, and the proposal is now beginning to take definite shape. But all children are not alike, and the physical exercise that is barely enough for one is enough to exhaust and injure others, and I have known cases in which the heart has been seriously damaged by overstrain. It is, therefore, absolutely necessary that there should be an examination into the physical condition of children, so as to ascertain how much they can do with advantage and without injury. Nor is it only the heart and lungs that need to be inspected; the teeth, the nose, the eyes, and the ears should all receive attention. Part of this work must be done by medical men, part of it may probably be done by teachers who have received the necessary instruction. How much requires to be done and must be done by one or the other is a matter of detail which must be worked out later on.

Time will not permit me to enter into the question of playgrounds, games, provision of glasses, division of children into classes according to their powers, feeding of children, training in cookery, continuation classes, drill, and volunteering. All the children should be made to learn the general laws of health, the evils of spitting, the use of fresh air with avoidance of chill, the care of the teeth, and the mischief that may be done by tobacco and alcohol.

The improvement of the health and physique of the nation is a very complex problem. It needs the co-operation of everyone, and, especially, it requires the co-ordination of all the bodies already working to attain the end. Many of these bodies are not even known to one another, and in order to ensure their co-operation, a National League for Physical Education and Improvement has been founded. The object of this is not to interfere with any body now working for the good of the people, but to make them known to one another, to help them in their work, and to initiate such work in those

parts of the country where no such work is being at present done. By this means we hope to save the babies, to help the children, to train the youths, to raise up a race of sturdy men and women, and to lessen the number of the diseased, the feeble, the unemployed, and the criminals. The burden of taxation which this country has now to bear—imperial, national, and local—is very heavy. It shows no signs of growing lighter, and every effort to lessen it ought to be welcomed. On this ground, therefore, as well as on the higher grounds of patriotism and humanity, I believe that the National League for Physical Education and Improvement ought to commend itself to everyone in the country.





